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Claims

1. A method for modulating growth-factor activation comprising contacting a cell or an organism which contains a growth-factor receptor capable of being activated with a modulator of G-protein mediated signal transduction.

10 2. The method of use of claim 1, wherein the activation of the growth-factor receptor is mediated by its extracellular domain.

Sub D2 3. The method of claim 1 or 2, wherein the activation of the growth-factor receptor is mediated via an extracellular signal pathway.

15 4. The method of any one of claims 1-3, wherein the growth-factor receptor is activated by tyrosine phosphorylation.

5 Sub D2 5. The method of any one of the previous claims, wherein said growth-factor receptor is EGFR.

20 6. The method of any one of the previous claims, wherein the modulator acts on a G-protein, a G-protein coupled receptor and/or a proteinase.

25 7. The method of claim 6, wherein the modulator acts on a proteinase.

Sub D3 8. The method of claim 7, wherein said modulator acts on said proteinase by directly stimulating or inhibiting the proteinase activity.

30 9. The method of any one of claims 7 or 8, wherein said proteinase cleaves a growth-factor ligand precursor.

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10. The method of claim 9, wherein said precursor is a membrane-associated molecule.

11. The method of claim 9 or 10, wherein said growth factor ligand precursor is proHB-EGF and said growth-factor receptor is EGFR.

12. The method of any one of claims 7-11, wherein said proteinase is a membrane-associated proteinase.

10 13. The method of any one of the claims 7-12, wherein said proteinase is a metalloproteinase.

14. The method of claim 13, wherein said metalloproteinase is a zinc-dependent proteinase.

15 15. The method of any one of claims 7 to 14, wherein said proteinase activity is inhibited by batimastat.

20 16. The method of any one of the previous claims, wherein said modulator acts on cell which is different from the cell which contains the growth-factor.

25 17. The method of any one of the previous claims for the prevention or treatment of disorders associated with or accompanied by a disturbed, e.g. pathologically enhanced growth-factor receptor activation.

18. The method of claim 17 for the treatment of cancer or asthma.

30 19. The method of any one of the previous claims, wherein said modulator is administered as a pharmaceutically acceptable composition.

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Sub
C2

20. A method for identifying and providing modulators of G-protein
mediated signal transduction comprising contacting a cell which
contains a growth-factor receptor capable of being activated with a
test compound suspected to be a modulator of G-protein mediated
signal transduction and determining the degree of growth-factor
receptor activation.

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Add B4

Add F1

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